

AMENDMENT

SERIAL NO. 09/577,329

Page 2

### Amendments to the Claims

This listing of claims will replace all prior versions, and listings, of claims in the application.

#### LISTING OF CLAIMS

1. (Original) A method for establishing a call to a wireless directory number (DN) associated with a wireless mobile station, said wireless DN being one of a non-geographic DN and a non-dialable DN, said method comprising:

receiving a local access DN at an originating switching node;  
identifying a signaling node associated with said local access DN;

obtaining, from a database residing at a home location register, said wireless DN associated with said local access DN;

utilizing said wireless DN to determine a route that includes said originating switching node and a visited switching node serving said wireless DN; and

establishing a connection to said wireless mobile station via said determined route.

2. (Original) A method as claimed in claim 1 wherein said local access DN is a geographic DN maintained at said originating switching node.

3. (Original) A method as claimed in claim 2 further comprising associating said geographic DN with said wireless DN in said database residing at said home location register prior to said receiving operation.

## AMENDMENT

SERIAL NO. 09/577,329

Page 3

4. (Currently Amended) ~~A method as claimed in claim 1 wherein said local access DN is a first local access DN, said originating switching node is a first originating switching node, said first local access DN is maintained at said first originating switching node, and said method further comprises:~~ A method for establishing a call to a wireless directory number (DN) associated with a wireless mobile station, said wireless DN being one of a non-geographic DN and a non-dialable DN, said method comprising:

establishing a second local access DN maintained at a second originating switching node; and

associating each of [[said]] a first local access DN and said second local access DN with said wireless DN in said database at said a database at a home location register;

receiving said first local access DN at a first originating switching node, said first local access DN being maintained at said first originating switching node;

identifying a signaling node associated with said first local access DN;

obtaining, from said database residing at said home location register, said wireless DN associated with said first local access DN;

utilizing said wireless DN to determine a route that includes said first originating switching node and a visited switching node serving said wireless DN; and

establishing a connection to said wireless mobile station via said determined route.

5. (Original) A method as claimed in claim 1 wherein said originating switching node includes an Advanced Intelligent Network (AIN)-capable Service Switching Point (SSP) and the signaling node comprises an AIN-capable Service Control Point (SCP).

## AMENDMENT

SERIAL NO. 09/577,329

Page 4

6. (Original) A method as claimed in claim 1 wherein said identifying operation comprises invoking a trigger at said originating switching node indexed as a function of said local access DN.

7. (Original) A method as claimed in claim 1 further comprising:

transmitting, in response to said identifying operation, a route request from said originating switching node to said signaling node that includes said local access DN; and

sending a location request to said home location register that includes said local access DN.

8. (Original) A method as claimed in claim 1 wherein said obtaining operation comprises:

receiving, at said home location register, a location request from said signaling node that includes said local access DN; and

accessing said database to obtain said wireless DN associated with said local access DN.

9. (Original) A method as claimed in claim 1 further comprising sending, in response to said obtaining operation, a routing request that includes said wireless DN to a visitor location register with which said wireless mobile station was last registered.

## AMENDMENT

SERIAL NO. 09/577,329

Page 5

10. (Currently Amended) ~~A method as claimed in claim 9 further comprising:~~ A method for establishing a call to a wireless directory number (DN) associated with a wireless mobile station, said wireless DN being one of a non-geographic DN and a non-dialable DN, said method comprising:

receiving a local access DN at an originating switching node;  
identifying a signaling node associated with said local access DN;

obtaining, from a database residing at a home location register, said wireless DN associated with said local access DN;  
utilizing said wireless DN to determine a route that includes said originating switching node and a visited switching node serving said wireless DN, said utilizing operation including:

sending, in response to said obtaining operation, a routing request that includes said wireless DN to a visitor location register with which said wireless mobile station was last registered;

receiving, at said home location register, a temporary local directory number (TLDN) associated with said wireless DN in response to said routing request; and  
employing said local access DN to forward said received TLDN to said originating switching node;

establishing a connection to said wireless mobile station via said determined route.

11. (Original) A method as claimed in claim 10 wherein said employing operation comprises:

obtaining, from said database, said local access DN associated with said wireless DN;

associating said local access DN with said TLDN;

forwarding said TLDN associated with said local access DN to said signaling node; and

relaying said TLDN associated with said local access DN from said signaling node to said originating switching node.

## AMENDMENT

SERIAL NO. 09/577,329

Page 6

12. (Original) A telecommunications network comprising:  
an originating switching node configured to determine when a local access directory number (DN) associated with a wireless mobile station has been received and to generate a routing request that includes said local access DN;

a signaling node in communication with said originating switching node, said signaling node being configured to send a location request that includes said local access DN in response to receipt of said routing request;

a home location register in communication with said signaling node, said home location register including a database having a wireless DN associated with said local access DN, said wireless DN being one of a non-geographic DN and a non-dialable DN, said home location register being configured to access said database to obtain said wireless DN and utilize said wireless DN to obtain a temporary local directory number (TLDN) allocated to said wireless mobile station; and

a visited switching node serving said wireless DN, wherein said originating switching node is operative to establish a connection to said wireless mobile station using said TLDN via a route that includes said originating switching node and said visited switching node.

13. (Original) A network as claimed in claim 12 wherein said local access DN is a geographic DN maintained at said originating switching node.

14. (Original) A network as claimed in claim 12 wherein said originating switching node includes an Advanced Intelligent Network (AIN)-capable Service Switching Point.

## AMENDMENT

SERIAL NO. 09/577,329

Page 7

15. (Original) A network as claimed in claim 12 wherein said originating switching node includes a trigger for identifying a call destined to said wireless DN.

16. (Original) A network as claimed in claim 15 wherein said trigger includes an index and an identifier identifying said signaling node.

17. (Original) A network as claimed in claim 12 wherein said signaling node includes an Advanced Intelligent Network (AIN)-capable Service Control Point.

18. (Original) A network as claimed in claim 12 wherein said home location register is further configured to receive said TLDN from a visitor location register (VLR) with which said wireless mobile station was last registered, said TLDN being associated with said wireless DN, and said home location register is further configured to forward said TLDN to said signaling node utilizing said local access DN.

## AMENDMENT

SERIAL NO. 09/577,329

Page 8

19. (Original) In a telecommunications network having an originating switching node, a signaling node, a visitor location register, and a visited switching node, a home location register system for determining a route for a call to a wireless directory number (DN) associated with a wireless mobile station, said wireless DN being one of a non-geographic DN and a non-dialable DN, and said route including said originating switching node and said visited switching node serving said wireless DN, said system comprising:

a processor;

a database, in communication with said processor, in which said wireless DN is associated with each of a first and a second local access DN, said first local access DN being maintained at a first originating switching node and said second local access DN being maintained at a second originating switching node;

a computer-readable storage medium; and

executable code recorded on said computer-readable storage medium for instructing said processor to perform operations comprising:

receiving a location request from said signaling node that includes one of said first and second local access DNs; accessing said database to obtain said wireless DN associated with said one of said first and second local access DNs;

sending a routing request that includes said wireless DN to said visitor location register with which said wireless mobile station was last registered;

receiving a temporary local directory number (TLDN) associated with said wireless DN in response to said routing request; and

employing said local access DN to forward said received TLDN to said signaling node.

## AMENDMENT

SERIAL NO. 09/577,329

Page 9

20. (Original) A home location register system as claimed in claim 19 wherein said executable code instructs said processor to perform further operations comprising:

obtaining from said database, in response to said receiving operation, said one of said first and second local access DNs associated with said wireless DN;

associating said one of said first and second local access DNs with said TLDN; and

forwarding said TLDN associated with said one of said first and second local access DNs to said signaling node, said TLDN being used to establish a connection to said wireless mobile station via said route.

21. (New) A method for establishing a call to a wireless directory number (DN) associated with a wireless mobile station, said wireless DN being one of a non-geographic DN and a non-dialable DN, said method comprising:

receiving a local access DN at an originating switching node; identifying a signaling node associated with said local access DN;

obtaining, from a database residing at a home location register, said wireless DN associated with said local access DN;

utilizing said wireless DN to identify a visited switching node serving said wireless DN;

determining a route that includes said originating switching node and said visited switching node; and

establishing a connection to said wireless mobile station via said determined route.



## AMENDMENT

SERIAL NO. 09/577,329

Page 10

22. (New) A method as claimed in claim 21 wherein said local access DN is a geographic DN maintained at said originating switching node.

23. (New) A method as claimed in claim 22 further comprising associating said geographic DN with said wireless DN in said database residing at said home location register prior to said receiving operation.

24. (New) A method as claimed in claim 21 wherein said local access DN is a first local access DN, said originating switching node is a first originating switching node, and said method further comprises:

establishing a second local access DN maintained at a second originating switching node; and

associating each of said first local access DN and said second local access DN with said wireless DN in said database at said location register prior to said receiving operation.

25. (New) A method as claimed in claim 21 wherein said identifying operation comprises invoking a trigger at said originating switching node indexed as a function of said local access DN.

26. (New) A method as claimed in claim 21 further comprising: transmitting, in response to said identifying operation, a route request from said originating switching node to said signaling node that includes said local access DN; and

sending, from said signaling node, a location request to said home location register that includes said local access DN.

## AMENDMENT

SERIAL NO. 09/577,329

Page 11

27. (New) A method as claimed in claim 26 wherein said obtaining operation comprises:

receiving, at said home location register, said location request from said signaling node; and

accessing said database to obtain said wireless DN associated with said local access DN.

28. (New) A method as claimed in claim 21 further comprising sending, in response to said obtaining operation, a routing request that includes said wireless DN to a visitor location register with which said wireless mobile station was last registered.

29. (New) A method as claimed in claim 28 further comprising: receiving, at said home location register, a temporary local directory number (TLDN) associated with said wireless DN in response to said routing request; and

employing said local access DN to forward said received TLDN to said originating switching node.

30. (New) A method as claimed in claim 28 wherein said employing operation comprises:

obtaining, from said database, said local access DN associated with said wireless DN;

associating said local access DN with said TLDN;

forwarding said TLDN associated with said local access DN to said signaling node; and

relaying said TLDN associated with said local access DN from said signaling node to said originating switching node.